



State of Utah

DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF WATER QUALITY

Michael O. Leavitt

Governor

Dianne R. Nielson, Ph.D.

Executive Director

Don A. Ostler, P.E.

Director

288 North 1460 West

P.O. Box 144870

Salt Lake City, Utah 84114-4870

(801) 538-6146

(801) 538-6016 Fax

(801) 536-4414 T.D.D.

8/015/007

July 27, 1993

Mr. Arnold Brannon
3602B South Maplewood
Tulsa, Oklahoma 74135

RE: Mining the Mancos Shale and Operation
of a Process Facility in Emery County

Dear Mr. Brannon:

We have reviewed your request for approval to Commence Small Mining Operations" dated June 16, 1993, concerning the referenced project in Emery County, Utah.

It has been our understanding from the application that you plan to mine and extract precious metals from the Mancos Shale. The process is based on using a solution containing ammonium chloride, Nitric acid and Aluminum having a pH between 5.5 and 6.5 in a closed loop process. The capacity will start at approximately 100 tons per day and could expand to 1000 tons per day. The impoundment will consist of a series of steel tanks 10 feet wide, 50 feet long and 6 feet high.

We need to receive the following information in detail to continue our review:

1. A detailed description and location of the process facility.
2. A description and size of impoundments if proposed and how they are to lined to prevent or reduce leakage.
3. The total amount of chemicals that will be used per day and per year.
4. Plans and supporting information detailing the process facility.
5. Plans need to include systems for example liners that may be used to prevent contaminated solution from escaping to a receiving stream or the ground water table.

Mr. Arnold Brannon

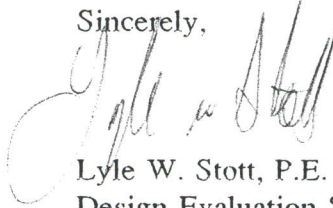
Page 2

July 27, 1993

Following our review of the proposed facility we will advise you whether you will need a ground water, discharge, and/or construction permits. The permits must be issued before you can begin construction.

If we can be of further assistance, please let me know.

Sincerely,

A handwritten signature in dark ink, appearing to read "Lyle W. Stott", is written over the typed name.

Lyle W. Stott, P.E.

Design Evaluation Section

LWS:rvg

cc: Mr. Holland Shepherd - Division of Oil, Gas and Mining
Southeast District Health Department

N:BRANNON.007
FILE:INDUSTRIAL